## Standards of Public Land Health Evaluation of 64032 L-X RANCH Allotment [ 12/06/2006 ]

The Roswell Field Office conducted a (RHA) Rangeland Health Assessment at 1 study site within L-X Ranch, allotment #64032. These assessments evaluated Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of this study site. Existing monitoring data was incorporated into and in support of this field assessment. A summary of each assessment is attached and shown in the following table.

| Study Area or      | UPLAND |                            |                     | BIOTIC |                            |                     | RIPARIAN |                            |                     |
|--------------------|--------|----------------------------|---------------------|--------|----------------------------|---------------------|----------|----------------------------|---------------------|
| Assessment<br>Area | Meets  | Monitor<br>an<br>Indicator | Does<br>Not<br>Meet | Meets  | Monitor<br>an<br>Indicator | Does<br>Not<br>Meet | Meets    | Monitor<br>an<br>Indicator | Does<br>Not<br>Meet |
| 64032-SW-F280      | X      |                            |                     | X      |                            |                     | N/A      |                            |                     |

Twenty-two (22) indicators for Rangeland Health were evaluated for public land on L-X Ranch, allotment #64032. Ten of these assessed soil site stability; 11 hydrologic function; and 13 biotic integrity. These qualitative assessments in conjunction with quantitative information gathered from previous data collected on 1 trend plot location within this allotment were utilized to make rangeland health determinations. Quantitative evaluations are performed by the Roswell Field Office, which include some or all of the following: ground cover, vegetative cover and composition, production, frequency, and ecological condition. These collections which were initiated in the late 1970's/early 1980's are scheduled and conducted approximately every 5 years.

The L-X Ranch allotment is approximately 4,221 acres in size. According to GIS records, the allotment is divided into two pastures. The west pasture is mostly public land. The east pasture is mostly private and state land with a lesser amount of public. The allotment consists of gently sloping, undulating terrain ranging in elevation from approximately 4000 feet to near 4300 feet. Livestock were not observed on the allotment at the time of the visit. The allotment has only one study site (64032-SW-F280) that is located in the west pasture. This site was visited on April 23, 2007 and is within a Shallow SD-3 ecosite. According to GIS data, most of the allotment is within this ecosite.

Soil throughout this allotment is relatively stable to very stable. This Shallow SD-3 ecosite has lots of surface rock that lends stability to the soil surface. Hydrologic function is good throughout with adequate herbaceous ground cover. Biotic integrity is high throughout.

In the vicinity of the study site, all but one of the soil indicators rated "none to slight". Water flow patterns rated "slight to moderate". Soil is very stable with minimal indications of erosion. Hydrologic function was rated similarly. Herbaceous ground cover was good for the site. All of the biotic integrity indicators rated "none to slight". There was good species diversity. Black grama was the dominant grass. Annual production was high. Litter cover was high. There has

been a slight increase in broom snakeweed, but not enough to affect F/S groups at this time. Wildlife habitat is good for pronghorn, which were observed near the site.

In the professional opinion of the Assessment Team, public land within L-X Ranch, allotment #64032 meets Upland and Biotic Standards. There are no Riparian issues present therefore this standard was not addressed. See site notes, comments and recommendations for further information regarding this assessment.

**Recommendations:** The management strategy on this allotment appears to be working.

| RFOs Upland and Biotic Standard Assessment Summary Worksheet |                              |  |   |  |              |                         |      |        |      |
|--|------------------------------|--|---|--|--------------|-------------------------|------|--------|------|
|  |                              | SITE 640   | 32-S  | SW-1   | F <b>280</b> |                         |      |        |      |
| Legal Lan  | nd Desc                      | NESE 3 0100S 0220E<br>Meridian 23 Acreage 215          |   | 2152   |              |                         |      |        |      |
|  | Ecosite                      | 042CY025NM SHALLOW SD-3 Photo Taken Y                  |   | Y  |              |                         |      |        |      |
| Wa   | tershed                      | 13060008130 BERREND                                    | О   |  |              |                         |      |        |      |
| Ob   | servers                      | JACKSON; DILLEY  |   |  | Ot           | servation I             | Date | 04/23/ | 2007 |
| County Soil  | Survey                       | NM644 CHAVES NORT                                      | Н   |  | ,            | Soil Var/Ta             | ıxad |        |      |
| Soil Ma  | ap Unit                      | EbC  |   |  | So           | il Taxon Na             | ame  | ECTOR  |      |
| Textur   | e Class                      | NM644 CBV-L  |   |  |              | Soil Pl                 | nase | ЕСТО   | R    |
| Texture M  | Iodifier                     | NM644 VERY COBBLY<br>LOAM,D                            |   |  |              |                         |      |        |      |
|  | ed Avg<br>Annual<br>pitation |  | (   | Obse   | rved Avg G   | rowing Sea<br>Precipita |      |        |      |
| NOAA<br>Precij   | Annual pitation              | 10   | .55   |  | NOAA G       | rowing Sea<br>Precipita |      |        | 8.18 |
| NOAA Avg Annual Precipitation                                |                              | 9  | 9.73 NOAA Avg Growing Season Precipitation              |  |              | 8.01                    |      |        |      |
|  |                              | A two track road passes the east. There is no apparent | _   | -  |              | _                       |      | -      |      |
| Part 2. Attri  | butes a                      | nd Indicators  |   |  |              |                         |      |        |      |
|  |                              |  |   | eparture from Ecological Site<br>escription/Ecological Reference Areas |              |                         |      |        |      |
| Attribute  | Indicato                     | ors  | Extreme Moderate to Extreme Moderate Slight to Moderate |  |              | None<br>to<br>Slight    |      |        |      |
| S H  | Rills                        |  |   |  |              |                         | X    |        |      |

| Comments: | No rills.  |        |
|-----------|--|--------|
| SH        | Water Flow Patterns  | X      |
| Comments: | Very short and stable.   |        |
| S H       | Pedestals and/or Terracettes   | X      |
| Comments: | Minimal.   |        |
| SH        | Bare Ground  | X      |
| Comments: | Much less than expected. There is lots of surface rock, gravel and pave  | ment.  |
| SH        | Gullies  | X      |
| Comments: | Rare. Stable. Vegetated on banks and bottom.   |        |
| S         | Wind-scoured, Blowouts, and/or Deposition Areas  | X      |
| Comments: |  |        |
| Н         | Litter Movement  | X      |
| Comments: | Uniform distribution.  | ·      |
| SHB       | Soil Surface Resistance to Erosion   | X      |
| Comments: | Stability of surface aggregates looks adequate for the site. There is a hipercentage of rock that lends stability to the site. | gh     |
| S H B     | Soil Surface Loss or Degradation   | X      |
| Comments: | Soil surface is intact and stable.   | ·      |
| Н         | Plant Community Composition and Distribution Relative to Infiltration and Runoff   | X      |
| Comments: | Herbaceous ground cover is greater than expected for the site.   | ·      |
| SHB       | Compaction Layer   | X      |
| Comments: |  |        |
| В         | Functional/Structural Groups   | X      |
| Comments: | Slight increase in snakeweed but grasses are dominant. Grass composit adequate for the site.                                   | ion is |
| В         | Plant Mortality/Decadence  | X      |
| Comments: |  |        |
| Н В       | Litter Amount  | X      |
| Comments: | Exceeds expected of 5-8%.  |        |
| В         | Annual Production  | X      |
| Comments: | >80% of potential. 2006 was a productive year.   |        |
| В         | Invasive Plants  | X      |

| Comments: | None observed.                                     |
|-----------|--|
| В         | Reproductive Capability of Perennial Plants X      |
| Comments: | Desirable forage grasses produced seed in 2006.    |
| S         | Physical/Chemical/Biological Crusts X              |
| Comments: | As expected for the site.                          |
| В         | Wildlife Habitat X                                 |
| Comments: | Good for antelope. Antelope were observed on site. |
| В         | Wildlife Populations X                             |
| Comments: |  |
| В         | Special Status Species Habitat X                   |
| Comments: | N/A  |
| В         | Special Status Species Populations  X              |
| Comments: | N/A  |

## Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

| Standard<br>Attribute |            | Extreme | Moderate<br>to<br>Extreme | Moderate | Slight to<br>Moderate | None<br>to<br>Slight |
|-----------------------|------------|---------|---------------------------|----------|-----------------------|----------------------|
| S                     | Soil       | 0       | 0                         | 0        | 1                     | 9                    |
| Н                     | Hydrologic | 0       | 0                         | 0        | 1                     | 10                   |
| В                     | Biotic     | 0       | 0                         | 0        | 1                     | 12                   |

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

| Attribute | Rationale   | Does Not<br>Meet | May<br>Need<br>More Info | Meets |
|-----------|---|------------------|--------------------------|-------|
| Soil      | Soils are very stable with minimal evidence of erosion. | 0                | 0                        | 10    |

| Hydrologic |  | 0 | 0 | 11 |
|------------|--|---|---|----|
| Biotic     | Production is good. Herbaceous cover is good. Black grama remains the dominant grass. There is good species composition. | 0 | 0 | 13 |

Site Notes: Soils are very stable. The area is very rocky, which lends stability to the site. The area is very productive for this Shallow site. Grasses were vigorous. Black grama remains the dominant grass. There is good species diversity. Snakeweed has increased slightly.

Plant species encountered included: shrubs: broom snakeweed, Dalea formosa, rainbow cactus, prickly pear, Acacia catclaw, cholla, eagleclaw cactus, beargrass (NOLINA)

forbs: filaree (ERBO), locoweed (ASTRA), Hymenoxys spp, Camissonia spp., Linum spp., Chateopappa ericoides, desert holly, verbena

grasses: BOER, BOGR2, TRPI, MUSQ

## Determination of Public Land (Rangeland) Health for 64032 L-X RANCH

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these standards.

Field assessment worksheets and other available data that evaluate the local indicators were completed for this allotment. Based on these assessments, it is my determination that public land within L-X Ranch, allotment #64032, meets the (1) Upland Sites standard and (2) Biotic Communities, including Native, Threatened, Endangered, and Special Status Species standard. There are no public land Riparian areas on this allotment, therefore this standard was not addressed.

/s/ EDDIE BATESON

08/24/2007

Assistant Field Manager

Date